

GENERIC · POWERTRAIN

P0365

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0365

Camshaft Position Sensor 'B' Circuit (Bank 1)

P0365 means the engine computer has detected a problem with the electrical circuit for camshaft position sensor 'B' on bank 1, which is the side of the engine containing cylinder number one. The computer monitors the sensor's signal and flags this code when the voltage or signal pattern falls outside the expected range for the engine's operating conditions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine may hesitate, stumble, or misfire under acceleration or load
- Rough idle or intermittent stalling, especially when the engine is cold
- Reduced fuel economy or a noticeable loss of power
- Difficulty starting or extended cranking before the engine fires
- In some vehicles, the transmission may shift harshly or fail to enter overdrive

Common causes, most likely first

- 1 Faulty camshaft position sensor 'B' itself, due to internal failure or heat damage
- 2 Damaged or corroded wiring harness or connector at the sensor or at the engine computer
- 3 Open or shorted circuit in the sensor's signal, power, or ground wire
- 4 Contaminated or incorrectly installed sensor, such as metal debris stuck to the magnet
- 5 Worn or damaged reluctor wheel or tone ring on the camshaft that the sensor reads
- 6 Engine computer (ECM/PCM) internal fault, though this is rare
- 7 Poor engine ground or voltage supply issue affecting the sensor circuit



How to diagnose and fix it

- 1 Use an OBD-II scanner to confirm P0365 is the only code and check for related cam or crank sensor codes
- 2 Visually inspect the sensor, connector, and wiring for damage, corrosion, or loose pins
- 3 Measure the sensor's resistance and compare it to the manufacturer's specification if available
- 4 Check for reference voltage and ground at the sensor connector with the key on and engine off
- 5 Perform a wiggle test on the harness while watching live data for the cam sensor signal to catch intermittent faults
- 6 Inspect the reluctor wheel or tone ring for damage or debris if accessible without major disassembly
- 7 Replace the sensor only after electrical tests confirm the circuit is sound, then clear codes and verify the repair

What the code does not always mean

- A P0365 code often sets because of a poor connection at the sensor plug, not a failed sensor, so always check the pins and terminals before replacing parts.
- On many engines, a failing camshaft sensor 'B' can cause the variable valve timing system to default to a fixed position, leading to poor performance that mimics other faults.
- The code can be triggered by a stretched timing chain or belt that has altered the camshaft timing, so a mechanical timing check is wise on high-mileage engines.
- Some vehicles use the camshaft sensor 'B' signal for sequential fuel injection and ignition timing, so ignoring the code can eventually damage the catalytic converter from unburned fuel.
- After replacing the sensor, the engine computer may need a relearn procedure or several drive cycles before the code clears permanently, so do not assume the fix failed if the light stays on briefly.

Can I keep driving with P0365?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or long trips because a faulty cam sensor can cause stalling or poor engine performance. If the engine runs rough or stalls frequently, stop driving and have the vehicle towed to prevent safety risks.

Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Basic hand tools (socket set, screwdrivers, pliers)
- Electrical contact cleaner and dielectric grease
- Manufacturer service information for wiring diagrams and sensor specifications



Reading P0365

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 3** Ignition system and misfire.
- 65** The exact fault within that area.

Often seen with

P0016 Crankshaft/Camshaft Position Correlation (Bank 1 Sensor A) · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P0345** Camshaft Position Sensor A Circuit (Bank 2) · **P0366** Camshaft Position Sensor 'B' Circuit Range/Performance (Bank 1) · **P0369** Camshaft Position Sensor 'B' Circuit Intermittent (Bank 1)

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0365/>

